## **CHAPTER THREE**

# AFFECTED ENVIRONMENT, IMPACTS AND MITIGATION MEASURES

### POPULATION AND EMPLOYMENT

# AFFECTED ENVIRONMENT

This section summarizes population and employment data gathered and analyzed for this EIS. See Appendix A for additional detailed information gathered from the U.S. Census and other sources.

## **Population**

#### POPULATION GROWTH

In 2000, Seattle's population hit an all-time high. According to the U.S. Census Bureau, Seattle's population grew by approximately 9% during the 1990s to 563,374 residents (see Figure 12). This rate of growth was twice that of the 1980s. The growth between 1980 and 2000 reversed population declines in the 1960s and 1970s.

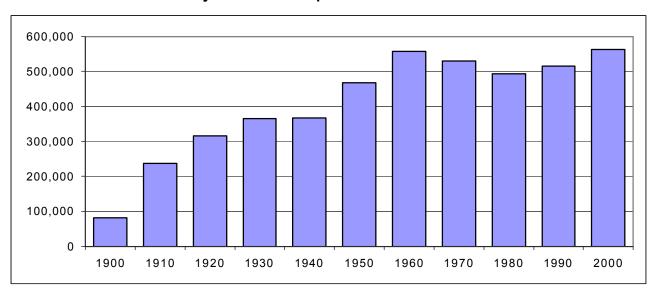


Figure 12
City of Seattle's Population 1900-2000

Sources: 1900-1990: U.S. Census Bureau online <a href="http://www.census.gov/population/www/documentation/twps0027.html">http://www.census.gov/population/www/documentation/twps0027.html</a>, various tables 2000: U.S. Census Bureau,

http://www.census.gov/population/www/documentation/twps0027.html, various tables 2000: U.S. Census Bureau 2001, Census 2000 Table DP-1

However, Seattle grew at a slower rate than King County and the State of Washington during both the 1980s and 1990s. During the 1990s, the County's total population increased by 15% to 1.7 million residents, and Washington's total population increased 21% to 5.9 million residents. Seattle's share of King County's population consequently declined in the 1990s, from 34% to 32%. This generally indicates continued suburbanization of growth in King County, outside the regional center of Seattle. However, strong Downtown residential growth helped counter this trend.

Seattle's increase in population is primarily due to immigration into the region. According to the United States Census 2000, 61% of Seattle's residents were not born in Washington State. According to the Washington State Office of Financial Management, 53% of residential growth in King County throughout the 1990s was a result of migration into the County, as opposed to natural growth resulting from births. Consequently, growth rates in Seattle are likely to be more influenced by economic factors and job growth than birth rates.<sup>1</sup>

During the 1990s, the Downtown Urban Center was one of the fastest-growing areas in the city with a 65% increase in population over ten years to 20,088 residents. This level of growth was considerably greater than the minimal Downtown population growth during the 1980s. Increased growth in Downtown Seattle reflects the several different trends:

- more small households better suited to small multifamily units;
- changes in perceptions about living and building in Downtown neighborhoods;
- a booming economy bringing more people to the region and creating a larger segment of the population with higher paying jobs;
- greater interest in shorter commutes to/from work, due to increased congestion in the region;
- an evolving concentration of cultural amenities and entertainment in Downtown Seattle; and
- more limited opportunities for new housing growth in other Seattle neighborhoods.

## Households

At 1.34 persons per household, the Downtown Urban Center's average household size is significantly smaller than the average for Seattle. However, Downtown's household size is growing. In 1990 the average Downtown household contained 1.26 persons. Based on trends from previous decades, some population forecasts had assumed that Seattle's average household size would shrink significantly. In fact, at 2.08 persons per household, the city's average household size remained close to the 1990 average of 2.09 persons per household.

The Downtown Urban Center is composed of five Urban Villages: Belltown, Chinatown-International District, Commercial Core, Denny Triangle and Pioneer Square. During the 1990s, Belltown experienced the greatest residential growth of any Downtown neighborhood – approximately two-thirds (2,641 new households) of the Downtown Urban Center's growth occurred there during the 1990s (Table 7). Another 27 percent (1,063 households) of Downtown's household growth occurred in the Commercial Core neighborhood, and the Chinatown/International District neighborhood received 15 percent of Downtown household growth. The Denny Triangle and Pioneer Square neighborhoods experienced lesser but notable increases in households, and the Denny Triangle saw a significant increase in the number of residents not in Group Quarters. All Downtown neighborhoods had percentage growth rates at least twice that of the city as a whole.

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<sup>&</sup>lt;sup>1</sup> Birth rates do drive population growth in some of Washington's rural counties.

Table 7
Downtown Urban Center Village Household and Population Change, 1990-2000

Downtown Urban Center Villages	1990 HHs	2000 HHs	% Change	1990 Pop.	2000 Pop.	% Change
Belltown	3,230	5,871	82%	4,131	8,504	106%
Denny Triangle	573	844	47%	732	1,605	119%
Commercial Core	1,314	2,377	81%	3,886	5,521	42%
Pioneer Square	603	755	25%	1,507	1,756	17%
Chinatown/International District	941	1,514	61%	2,053	2,702	32%
Downtown Urban Center	6,661	11,361	71%	12,309	20,088	63%
Seattle Total	236,702	258,499	9%	516,259	563,374	9%

Source: U.S. Census Bureau, City of Seattle, 2001 Note: HH = Household; Pop. = Population

#### **DEMOGRAPHICS**

According to the 2000 U.S. Census, the composition of Downtown's residential population differs from the city and region in a number of ways, but as it grows it is starting to look more like the citywide population.

Unlike the city as a whole and King County, there are more male than female residents of Downtown Seattle. This holds true throughout all age ranges, except for children and residents more than 65 years old. However, the share of the Downtown population that is female has grown from 33% in 1990 to 39% in 2000.

Downtown Seattle has larger proportion of minority residents than the city or region as a whole. Downtown's residents are more likely to be Asian, Black or American Indian and Alaskan Native than the city as a whole, King County, or the region.

Only 4% of Downtown Seattle's residents are children under 18 years old. Citywide, sixteen percent of the population is under 18 years old. However, in 1990 only 2% of Downtown's residents were children, indicating a comparatively large increase in the number of children living Downtown. At the same time, the share of Downtown residents who are over 65 years old has fallen from 19% to 13%. Overall, Downtown has a much higher percentage of residents between the ages of 25 and 64 than the city or region, with especially large shares of residents between the ages of 25 and 34, a group that had a similar share of the Downtown population in 1990. However, the 44 to 54 year old age group's share of the Downtown population grew the most over the last ten years. In 1990, this group represented 12% of the Downtown population. In 2000, 17% of Downtown residents were between 44 and 54 years old.

## **Households**

Downtown's household composition is very different from the city and region as a whole. Almost three-quarters of all Downtown households are single persons living alone (down from 79% in 1990). Only 4% of Downtown households contain three or more people. This contributes to the average household size of 1.34 persons in Downtown. The city as a whole has a much greater proportion of households with three or more persons (25%), but even this is lower than the region's proportion (39%). The Denny Triangle has

the smallest households in Downtown Seattle with an average of 1.24 persons per household, while the Chinatown/International District and Pioneer Square villages have larger than average household sizes.

Given the large proportion of one-person households in Downtown, it is not surprising to see that "non-family" households (which include single-person households) are the predominant type of household in Downtown Seattle. Only 17% of Downtown's households are family households, with one-or-more household members related by blood or marriage to the householder. On the other hand, most of the households in the region are family households. Family households make up two-thirds of the households in King, Kitsap, Pierce and Snohomish counties. They have grown from 14% of Downtown households in 1994, but their share Downtown remains much lower than the rest of the region.

### **Population Not in Households**

A sizable portion of Downtown Seattle's households are in "group quarters." According to the Census Bureau, all people not in a household are living in group quarters. They classify group quarters as either institutional (correctional facilities, nursing homes, and mental hospitals) or non-institutional (college dormitories, military barracks, group homes, missions and shelters). One-quarter of the Downtown Urban Center's population is in group quarters. The largest group quarters facility is the King County Jail located in the Commercial Core, with beds for 1,697 inmates, most in use. Other group quarters serving sizable populations include homeless shelters throughout Downtown, and senior housing and student housing buildings in Belltown.

Homeless people are a significant part of Downtown's non-household population. Downtown Seattle has historically provided many of the homeless beds available in the region. A recent study of homeless shelter use by the Seattle/King County Coalition for the Homeless found 3,674 people sleeping in shelters in Seattle. That same night, 1,001 people were sleeping in shelters in other parts of King County. Because they have no fixed address, homeless populations are difficult to count. The most recent count of homeless residents in Seattle, performed by the Seattle/King County Homeless Coalition, found 2,040 homeless people sleeping outdoors in Seattle, in addition to the population in shelters.

# **Employment**

### **EMPLOYMENT GROWTH**

According to data from the Washington State Employment Security Department (ESD), total covered employment in Downtown in 2000 was approximately 174,528 jobs, of which two-thirds are located in the Commercial Core. As a dense office center, Downtown is a center of financial, insurance, real estate and services (FIRES) employment. These industries employ more workers than all other Downtown employment categories taken together. Downtown accommodates considerable government employment, the second most common employment category, in Federal, King County and Seattle City facilities, primarily in the south end of the Commercial Core. Retail employment is the third most common employment category, particularly in the Chinatown/International District.

Total non-agricultural covered employment in King County was approximately 1.16 million in 2001 (ESD, Puget Sound Regional Council [PSRC]). Downtown Seattle contains roughly 15% of the County's employment, and 34% of the City's employment. Approximately 21% of all FIRES jobs and 20% of government and education jobs in King County are located Downtown.

Seattle's four other Urban Centers combined (Capitol Hill/First Hill, the University District, Uptown and Northgate) account for nearly 20% of the City's employment. Fifty-four percent of Seattle's employment is located in designated Urban Centers. Employment in Manufacturing/Industrial (M/I) Centers

(Duwamish and Ballard/Interbay) and Hub Urban Villages represented 16% and 9% of the city's employment, respectively.

Employment growth information from PSRC for 1980-2000 provides a longer-term perspective. Between 1980 and 2000, the city's net job growth was approximately 242,700 jobs (63% growth), including 71,000 additional jobs in Downtown (63% growth). Net job growth in Downtown during the 1980s was over twice as much as during the 1990s (49,600 versus 21,400 jobs). Downtown gained a greater portion of the city's total employment during the 1980s. Through the 1990s Downtown maintained its share of approximately one-third of the jobs in Seattle. The financial/insurance/real estate/services sector was the leading employment category in terms of job growth in both Downtown Seattle and the city as a whole between 1980 and 2000, followed by the government/education and wholesale/trade/communications/ utilities (WTCU) sectors.

#### **INCOMES**

Residents of Downtown Seattle generally have much lower incomes than Seattle or King County residents as a whole. According to the 2000 U.S. Census, the median annual earnings of Seattle residents in 1999 was \$40,929 for male full-time workers and \$35,134 for female full-time workers. The median household income Citywide was \$45,736. The median income for a male resident of Downtown Seattle was \$20,491; for females, the median was \$18,057, approximately half the citywide average. The median household income for all households downtown was \$22,816. Overall, more than sixty percent of Downtown's households had incomes in 1999 that were less than half the King County median income.

Downtown Seattle's distribution of household incomes reflects the large number of low-income housing units that have been available Downtown, and to a lesser extent, recently built high-end condominiums. The Downtown Urban Center has a disproportionately high share of the county's households earning less than \$25,000. In 1999, 53.4% of Seattle's households earned less than \$25,000, compared to 19.9% of King County's households. Downtown Seattle also has a higher portion of individuals in poverty: 32.3% of all Downtown residents were in poverty in 1999. According to the U.S. Census, in 1999, 8.4% of King County residents were in poverty.

Downtown has a lower share of households at almost all income levels over \$25,000. However, at the very highest income level, Downtown Seattle has a larger share of households. In 1999, Downtown Seattle had 470 households (4.1% of all households) that had incomes of more than \$200,000 in 1999. In comparison, 3.8% of King County households and 3.5% of Seattle households are in this income category. Approximately 70% of the Downtown households with incomes this high live in Belltown, with over 20% living in the Commercial Core.

A higher proportion of Seattle's and Downtown Seattle's residents are employed in Management, Professional, Sales and Office Occupations than in King County or Washington State as a whole. On the other hand, both Downtown Seattle and the City as a whole have lower than average shares of residents employed in Construction, Extraction and Maintenance, and Production, Transportation and Material Moving occupations.

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<sup>&</sup>lt;sup>2</sup> These data from PSRC use a different definition for Downtown, referring only to the portions of the Downtown Urban Center west of Interstate 5, and excluding the eastern half of the Chinatown/International District.

## POPULATION AND EMPLOYMENT PROJECTIONS

Four different sources provide some indication of the amount of residential and employment growth that may occur in Downtown Seattle over the coming twenty years:

- projections from the Puget Sound Regional Council (PSRC);
- market studies by Economics Research Associates (ERA);
- targets from the City of Seattle's Comprehensive Plan; and
- recent growth trends (see Table 8).

All four of these sources predict the Downtown residential population will more than double over the next twenty years. Downtown employment, already strong, will continue to grow by as much as 50% over the next twenty years. Given these four data sources, this EIS analyzes the impacts of the highest reasonable amount of growth projected for the next twenty years. The ERA projection of residential and employment growth in the Downtown Urban Center over the ten years between 2000 and 2010 was used here as a basis for the twenty-year growth projection. For the purposes of this EIS, between 2000 and 2020, growth in Downtown Seattle is projected to equal 17,500 new households and 70,000 new jobs. In order to accommodate that growth, an additional 18,375 new housing units, and 17.5 million square feet of office space would need to be added to the Downtown Urban Center.

Because the ERA forecast was for the entire Downtown Urban Center, a portion of that development was assumed to be included within the study area, and a portion of the development was assumed to occur outside of the study area. It was assumed that 90% of the growth in commercial space would occur within the study area over the twenty-year period, consistent with the amount of capacity available in the study area and recent development trends. On the other hand, only 40% of Downtown's residential growth was expected to take place within the study area, given the attractiveness of Belltown, Pioneer Square and the Chinatown/International District areas for residential development.<sup>3</sup>

Table 8
Downtown Urban Center
Households, Population and Employment, 2000 and 2020

	2000	2020 Comprehensive Plan Targets		2020 PSRC Projections		Extended 2020 ERA Projection	
Households	11,361	26,061	129%	22,893	102%	28,861	154%
Population	20,088	40,080	100%	37,617	87%	46,338	131%
Employment	174,527	237,227	36%	224,564	23%	244,527	40%

Sources: U. S. Census Bureau, 2001; City of Seattle Strategic Planning Office, 2001; Puget Sound Regional Council, 2003; ERA, 2000

# Comprehensive Plan Growth Targets

Seattle's 1994 Comprehensive Plan and the King County Countywide Planning Policies included twenty-year "growth targets" or projections for residential and employment growth in the Downtown Urban Center. In addition, "planning estimates" identified how growth might be divided within the Urban Center. These targets and estimates present levels of growth that balance growth in Downtown with growth in the rest of King County in pursuit of City and County growth management goals. The "Urban Center" is a County designation indicating an area expected to accommodate a large share of employment

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<sup>&</sup>lt;sup>3</sup> In the last five years, 68% of all new Downtown units have been built outside of the study area. In addition, 68% of units in Downtown projects with issued building permits as of January 1, 2002 were located outside of the study area.

and housing growth over twenty years. The Comprehensive Plan's targets and estimates for 1994 to 2014 indicate an expected doubling of Downtown households during this period. The Belltown and Denny Triangle neighborhoods are projected to receive 68% of Downtown's *residential* growth through 2014. Over 80% of Downtown's *employment* growth over the same period is expected to occur in the Commercial Core and Denny Triangle neighborhoods (see Table 9).

Table 9
Downtown Urban Center Villages
Comprehensive Plan "Planning Estimates" 1994-2014

Downtown Urban Center Villages	Additional Households (HH)	% of Urban Center's HH growth	Additional Jobs	% of Urban Center's Job growth
Belltown	6,500	44%	4,500	7%
Chinatown/International District	1,300	9%	2,800	4%
Commercial Core	1,300	9%	27,000	43%
Denny Triangle	3,500	24%	23,600	38%
Pioneer Square	2,100	14%	4,800	8%
TOTAL	14,700	100%	62,700	100%

Source: City of Seattle, Comprehensive Plan, 2001

## <u>Puget Sound Regional Council Forecasts</u>

The Puget Sound Regional Council (PSRC) has developed updated working forecasts of population, households and employment for the central Puget Sound region for the years 2010, 2020 and 2030. These projections are based on forecasts of regional economic trends. The PSRC uses a model to project future conditions based upon regional economic growth trends. The most recent forecasts were published in January 2003.

PSRC's model forecasts employment and residential growth in numerous subareas throughout the region. The Downtown area south of Denny Way is approximately the same as two of these subareas. The PSRC projects growth of 11,532 households between 2000 and 2020, or approximately 576 new households in Downtown per year. They project a population growth of 17,529 new residents in Downtown Seattle. Assuming a stable group quarters population of approximately 5,000 residents, this projection would result in a household size for new households of only 1.42 residents per household, up from the 1.34 residents per household currently residing Downtown, and continuing the growth in downtown household sizes. This projection is slightly lower than the Comprehensive Plan's twenty-year growth target for population growth.

The PSRC's employment projection is significantly lower than the Comprehensive Plan's projection. The PSRC has projected that Downtown Seattle would see growth of only 41,300 jobs during the period between 2000 and 2020. This twenty-year projected growth is compared to a growth of 71,000 jobs between 1980 and 2000 and a job growth of 28,500 jobs in the high growth six-year period of 1995-2001. PSRC's employment projection is a third lower than the Comprehensive Plan target.

# **Economic Research Associates Analysis**

In the winter of 2000, the City hired Economic Research Associates (ERA) to perform a market study of the office, hotel and residential markets in Downtown Seattle. This study, written during an aggressive

growth period in the real estate market, predicted a ten-year demand for 6,000 additional apartment units and 3,200 additional condominiums in Downtown Seattle. Extending this projection over the twenty-year period studied by this EIS would result in 18,400 new units. Assuming a vacancy rate of 5 percent, an addition of 17,500 households to the Downtown population might be expected. Household sizes are expected to continue to remain small, but will likely continue to grow, so 1.5 persons per household may be an appropriate household size to determine the potential population of these units. Using this household size would result in 26,250 additional Downtown residents over twenty years.

ERA projected demand between 2000 and 2010 for an additional 6.83 million square feet of office space Downtown. This amount of space could accommodate new 30,356 jobs. Further, there would be demand for an additional 5,300 hotel rooms in the greater Downtown Seattle area over the ten years between 2000 and 2010.

Much of the growth in office development is expected to result from continuing growth of traditional finance, real estate, legal services and government tenants Downtown. In addition, growth in high-tech industries, including growth in the software and Internet-related industries in Downtown Seattle, was expected to help increase demand for Downtown Seattle office space. Most of the tenants in the new residential units are expected to be younger professionals, and older singles and couples. Growth in the software industry was seen as driving much of the demand for higher-end rental units.

## Recent Development Trends and Residential Absorption

During the seven-year period from January 1995 through December 2002, 4,641 new dwelling units were built in the Downtown Urban Center – approximately 32% of the Comprehensive Plan's twenty-year residential growth target. The City had issued additional building permits for approximately 700 additional dwelling units. Belltown has been the most popular neighborhood for this residential growth, accommodating 59% of Downtown's growth. Rents in Downtown Seattle have been higher than those in the rest of the city, indicating tenants are willing to pay a premium to live Downtown. These and other data indicate a strong long-term residential growth trend in the Downtown Urban Center and other central urban areas of the city, emphasizing multifamily housing growth. If this level of growth were to be projected over twenty years, 15,470 additional housing units would be built, enough to house 14,695 households with a five-percent vacancy rate.

In the five years between 1996 and 2001, approximately 940,000 square feet of office space was absorbed annually in Downtown Seattle. At a standard ratio of 250 square feet per employee, this amount of office space could accommodate 3,760 new employees a year or 75,200 employees in twenty years. Over the twelve years between 1988 and 2001, the average amount of office space absorbed was 820,000 square feet a year. If this more modest rate of absorption were to occur, Downtown Seattle could accommodate approximately 65,600 new office jobs in twenty years.

## **IMPACTS**

# Alternative 1 – High End Height and Density Increase

### **EMPLOYMENT**

Under Alternative 1, the total capacity for development on vacant and underutilized properties in the study area is 38.32 million square feet of commercial space. If all currently redevelopable sites in the Downtown Urban Center were to be built-out, there could be as many as 338,000 employees in Downtown Seattle. Based on the ten-year ERA employment projections, this commercial capacity could accommodate as much as 48 years worth of employment growth if commercial demand continued at the same pace. Under this alternative, the maximum potential employment density Downtown could reach 350 employees per acre across Downtown Seattle.

According to the recent study by Craig Kinzer & Company with Cushman and Wakefield and the Seneca Real Estate Group, changes to zoning, in and of themselves, do not change the supply and demand cycles. In other words, increasing commercial densities does not necessarily lead to more development occurring in Downtown Seattle. The number of employees Downtown will instead be driven by economic forces larger than the Downtown real estate market. Factors such as the regional and international growth of industries most likely to seek Downtown office space, interest rates, the availability of funding for new development projects, and the regional transportation network are more likely to influence the amount of new Downtown office development than zoning changes.

Zoning changes increasing height and density limits alone will not change the amount of employment attracted to Downtown Seattle, or the type of industries likely to locate or expand in Downtown Seattle. Consequently, implementing zone changes in Alternative 1 is not likely to change the amount or type of Downtown employment over twenty years. Depending on the forecast used, the number of new jobs in the Downtown Urban Center could range between 41,000 and 71,000. Twenty years worth of employment growth could be concentrated primarily in the existing Office Core zones, particularly on underdeveloped parcels in the Denny Triangle Downtown Office Core 2 zone. Potentially difficult development sites in the Downtown Office Core 1 zone (those sites with older, actively used structures, smaller sites, or other development challenges) might not be redeveloped in the twenty-year time frame. This alternative might result in a higher concentration of hotel employment Downtown, because of potentially larger hotels on each individual site, and the potential co-location of residential and hotel uses within the same building, leading to increases in the demand for hotel employment.

### **POPULATION**

Under Alternative 1, the total capacity for residential development on vacant and underutilized properties in Downtown Seattle is 22,850 units. Assuming some vacancies, these units could house an additional 21,710 Downtown households. Based on the ERA household projections, this capacity could accommodate up to 26 years worth of residential demand. If all available residential capacity is used, there could be a maximum of 33,070 households in Downtown Seattle. Downtown Seattle's residential density could reach 35 households per acre.

According to a 2001 study by Keyser Marston Associates, Inc., population growth in most U.S. regions usually occurs as a result of job growth. While natural increase (more births than deaths) accounts for some growth, most long-term population growth in the Puget Sound region is a result of job growth – if there are jobs, people will move to the region, if there aren't jobs, people will leave. Under Alternative 1, the Downtown employment projected for the coming twenty years would lead to approximately 43,225

additional households in need of new housing in the region. These households would be formed by people new to the region, people leaving other jobs in the region, or the children of existing residents.

Extending the ERA forecast suggests that approximately 17,500 of these new households will seek housing in Downtown Seattle between 2000 and 2020, adding 21,900 new Downtown residents. Households that earn above 80% of the King County median area income for households (MAI) are expected to be able to afford privately financed housing. However, according to the Keyser Marston study, households earning less than 80% MAI may need public subsidies to be able to afford housing in Downtown Seattle. The Downtown Housing Bonus program, which uses partnerships between commercial developers and the City to leverage funding for permanent subsidized housing, could be a key source of funding for Downtown housing affordable to households earning less than 80% MAI. Table 10 shows the predicted household growth by income category. It assumes aggressive use of the Housing Bonus program and the ability to leverage money from that program to build additional units. It also assumes that the remaining households attracted to Downtown Seattle would earn above 80% MAI in order to be able to afford a market-rate housing unit in Downtown Seattle (for more discussion of this analysis, please see the Housing section and Appendix B).

Table 10

New Downtown Households by Income Group by Alternative, 2000-2020

		•	<u> </u>	<u>*</u>	
	0-30% MAI	30-50% MAI	50-80% MAI	>80% MAI	Total
Alternative 1	400	1,160	780	15,160	17,500
Alternative 2	520	1,520	1,020	14,440	17,500
Alternative 3	450	1,310	880	14,860	17,500
Alternative 4	330	950	640	15,580	17,500

Source: City of Seattle Strategic Planning Office, 2002.

The vast majority of new households are expected to occupy market-rate housing. As market-rate housing units tend to be larger than subsidized units, and can therefore accommodate larger households, an increase in the number of two-person households living Downtown would be likely. Households with more than two persons are less likely to find housing that meets their needs Downtown. Consequently, the average Downtown household size may grow slightly between 2000 and 2020 as it did between 1990 and 2000.

# Alternative 2 - Concentrated Office Core

#### **EMPLOYMENT**

Under Alternative 2, the total capacity for development on vacant and underutilized properties in the study area is 33.70 million square feet of commercial space. If all currently redevelopable sites in the Downtown Urban Center were to be built-out, there could be as many as 319,000 employees in Downtown Seattle, or 19,000 fewer employees than under Alternative 1. Based on an extension of the ERA employment projections, this commercial capacity could accommodate as much as 42 years worth of employment growth, or six fewer years than under Alternative 1. The maximum commercial density across Downtown Seattle could reach 335 jobs per acre. However, over the next twenty years both Alternative 1 and Alternative 2 are expected to result in the same number of Downtown employees. Under this zoning scheme, there would be enough developable land to accommodate projected employment over the period between 2000 and 2020.

### **POPULATION**

Under Alternative 2, the maximum potential capacity for residential development on vacant and underutilized properties in Downtown Seattle is 24,800 units. Assuming a standard vacancy rate, these units could house an additional 23,620 Downtown households. Based on the ERA 10-year projections of residential demand, this capacity could accommodate up to 27 years worth of residential demand. If all available residential capacity is used, there could be a maximum of 35,000 households in Downtown Seattle, or 37 households per acre.

Under any of the alternatives, the employment projected for the coming twenty years Downtown would lead to an additional 43,225 households in need of new housing in the region. ERA has forecast that 17,500 of these new households will seek housing in Downtown Seattle between 2000 and 2020, adding 21,900 new Downtown residents. Households that earn above 80% of MAI are expected to be able to afford privately financed housing. However, households earning less than 80% of MAI may need public subsidies to be able to afford housing in Downtown Seattle. Funding would be available to house approximately 3,060 households earning less than 80% of MAI or 30% more households than under Alternative 1 (Table 10, above).

# Alternative 3 – Residential Emphasis

#### **EMPLOYMENT**

Under Alternative 3, the total capacity for development on vacant and underutilized properties in the study area is 30.5 million square feet of commercial space. If all currently redevelopable sites in the Urban Center were to be built-out, there could be as many as 305,000 employees in Downtown Seattle, or 33,000 fewer employees than under Alternative 1. Based on an extension of the ERA employment projections, this commercial capacity could accommodate 38 years worth of employment growth, or ten fewer years than under Alternative 1. The maximum commercial density in Downtown Seattle could reach 325 jobs per acre. However, over the next twenty years, Alternatives 1 and 3 are expected to result in the same number of Downtown employees. Under this zoning scheme, there is enough developable land to accommodate projected employment over the period between 2000 and 2020.

#### **POPULATION**

Under Alternative 3, the maximum potential capacity for residential development on vacant and underutilized properties in Downtown Seattle is 27,440 units. These units could house an additional 26,070 Downtown households. Based on the ERA 10-year projections of residential demand, this capacity could accommodate up to 30 years worth of residential demand. If all available residential capacity is used, there could be a maximum of 37,430 households in Downtown Seattle.

Under any of the alternatives, the employment projected for the coming twenty years Downtown would lead to an additional 43,225 households in need of new housing in the region. Of these new households, ERA has forecast that 17,500 will seek housing in Downtown Seattle between 2000 and 2020, adding 21,900 new Downtown residents. Households that earn above 80% of the King County median income (MAI) are expected to be able to afford privately financed housing. However, households earning less than 80% of MAI may need public subsidies to be able to afford housing in Downtown Seattle. Funding would be available to house 2,640 households earning less than 80% MAI, 12 percent more than under Alternative 1.

## Alternative 4 – No Action

#### **EMPLOYMENT**

Under Alternative 4, the total capacity for development on vacant and underutilized properties is 28.65 million square feet of commercial space. If all currently redevelopable sites in the Urban Center were to be built-out, there could be 300,000 employees in Downtown Seattle, or 38,000 fewer employees than under Alternative 1. Based on an extension of the ERA employment projections, this commercial capacity could accommodate 37 years worth of employment growth, or eleven fewer years than under Alternative 1. The maximum employment density in Downtown Seattle could reach 314 jobs per acre. However, all alternatives are expected to result in the same number of Downtown employees over the next twenty years. Under this zoning scheme, there is enough developable land to accommodate projected employment over the period between 2000 and 2020.

#### **POPULATION**

Under Alternative 4, the maximum potential capacity for residential development on vacant and underutilized properties in the Downtown Urban Center is 26,140 units. These units could house an additional 24,830 Downtown households. Based on the ERA employment projections, this capacity could accommodate up to 29 years worth of residential demand. If all potential residential capacity is used, there could be a maximum of 36,190 households in Downtown Seattle at an average density of 39 households per acre.

Under any of the alternatives, the employment projected for the coming twenty years Downtown would lead to an additional 43,225 households in need of new housing in the region. Of these new households, ERA has forecast that 17,500 will seek housing in Downtown Seattle between 2000 and 2020, adding 21,900 new Downtown residents. Households that earn above 80% of MAI, are expected to be able to afford privately financed housing. However, households earning less than 80% of MAI may need public subsidies to be able to afford housing in Downtown Seattle. Funding would be available to house approximately 1,920 households earning less than 80% MAI or approximately 430 fewer households (18% less) than under Alternative 1.

### **MITIGATION STRATEGIES**

No mitigation strategies are proposed for the Population and Employment impacts of the alternatives. See the Land Use and Housing sections for discussion of proposed and other possible mitigation strategies relevant to Downtown residential and employment populations.

# SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS

No significant unavoidable adverse impacts are identified for any of the alternatives. Over the long term, the alternatives could have differing impacts on the number and composition of Downtown households and Downtown employees, but none of these impacts are identified as significant unavoidable adverse impacts.